# "STAPHYLINUS FULGIDUS" AS THE TYPE SPECIES OF SEVERAL STAPHYLINID GENERA (INSECTA, COLEOPTERA, STAPHYLINIDAE). Z.N.(S.) 2221

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"Staphylinus fulgidus" has been used by various authors as the type species of several staphylinid genera, namely Gyrohypnus Leach, 1819, Xantholinus Dejean, 1821, Othius Stephens, 1829, and Gauropterus C.G. Thomson, 1860. Because of the absence of strict nomenclatural rules, certain usage of the respective generic names developed in the course of the years. This usage was followed until 1939 by all modern authors; even after Tottenham (1939, 1949), and especially Blackwelder (1952), introduced drastic changes based on type species designations, the majority of authors still followed the accustomed long-standing usage. The purpose of this paper is to preserve these long-standing usages, especially that of the name Xantholinus (type genus of the subfamily XANTHOLININAE), which, due to the changes proposed by Tottenham and by Blackwelder, disappeared from the list of valid staphylinid genera.

- 2. Therefore, application is hereby made for official designation of type species of the genera concerned to preserve the accustomed long-standing usage. The cases are being referred to the Commission in accordance with Article 70a of the International Code of Zoological Nomenclature and with the amendments to the Code (Bull. zool. Nom. vol. 31, 1974: 79, Art. 23a-b).
- 3. Blackwelder (1952: 176) has shown that up to 1819, there were only two proposals of the name Staphylinus fulgidus, both by Fabricius (1787: 220 and 1792: 525). In 1792, Fabricius did not consider the junior name fulgidus a homonym since he removed in the same publication the senior name fulgidus to the genus Paederus. Blackwelder also has shown (and there is no reason why his conclusion should not be accepted) that the junior name of 1792 was the species placed in the genus Quedius by Erichson (1839: 486), and that in the case of the four xantholinid genera Gyrohypnus, Xantholinus, Othius, and Gauropterus, we are dealing exclusively with the senior S. fulgidus of 1787 (see Blackwelder, 1952: 176 for details). However, several subsequent misidentifications by (1) Paykull (1789: 22) [= Othius punctulatus (Goeze, 1777)], (2) Gravenhorst (1802: 48) [= Xantholinus glabratus

(Gravenhorst, 1802)], and (3) Stephens (1833: 258) [= Othius punctulatus (Goeze, 1777)] complicated the matter.

- 4. It was in 1819 that Samouelle (1819: 172) for the first time used Staphylinus fulgidus as a type species by designating it as the type species of his genus Gyrohypnus (ex Kirby MS.) (it was also the only species). In accordance with Article 16a(v) of the Code this constituted an indication (Art. 12) and made the name Gyrohypnus available. Unfortunately, this indication was obviously ambiguous and later caused considerable confusion. Most subsequent modern authors ignored the publication of Gyrohypnus in Samouelle's book, apparently because it was published without any formal description. They attributed the name to Mannerheim (1831: 7), who gave the first formal description of Gyrohypnus by including the genus in his key to genera, and they mostly considered it as a subgenus of Xantholinus (e.g. Ganglbauer, 1895: 477). In 1939 Tottenham tried to clarify the identity of "Staphylinus fulgidus" and arrived at the conclusion from indirect evidence (all details in Tottenham, 1939: 235), that the species Samouelle had in mind actually was Staphylinus fulgidus sensu Paykull, 1789 (synonym of Staphylinus punctulatus Goeze, 1777 and misidentification of Staphylinus fulgidus Fabricius, 1787) and therefore used the name Gyrohypnus for the genus known previously as Othius Stephens, 1829. In 1952 Blackwelder disregarded Tottenham's conclusion, arguing that there was no such species as Staphylinus fulgidus Paykull, 1789, for Paykull merely cited the Fabricius species from 1787. He concluded (all details in Blackwelder, 1952: 176) that Staphylinus fulgidus Fabricius, 1787, must be accepted as the species referred to by Samouelle and therefore the type species of Gyrohypnus, which becomes the correct name for the genera known previously as Xantholinus Dejean, 1821, Othius Stephens, 1829, and Gauropterus C.G. Thomson, 1860.
- 5. In 1833, Stephens (1833: 258) again employed Staphylinus fulgidus as a type species in the following discussion under the genus "Gyrohypnus, Kirby" [sic]: "Staphylinus fulgidus of Gravenhorst being given as the type of the genus Xantholinus Dahl, and that being merely a catalogue one but subsequently characterised by the lamented Latreille as having the front tarsi dilated in either sex, a character at variance with the insect above mentioned, which is the type of the genus Othius, ......". Tottenham (1939: 236) comments on Stephens's statement as follows: "On the assumption, therefore (for which there appears to be no evidence), that fulgidus is the type of Xantholinus Dahl, and because fulgidus will not agree with the characters which define Xantholinus, Stephens resurrects for Xantholinus the name Gyrohypnus Kirby of which fulgidus was designated type by Samouelle (1819), at the

same time making fulgidus the type of his new genus Othius." Tottenham did not accept Stephens's statement as the type-species designation for Xantholinus, but identified Stephens's Staphylinus fulgidus, along with Staphylinus fulgidus cited by Samouelle (1819: 172), with Staphylinus fulgidus sensu Paykull, 1789 (all details in Tottenham, 1939: 236) and consequently synonymised Othius with Gyrohypnus (see also para. 2). Blackwelder (1952: 176, 279 and 404) considered Stephens's statement as the type-species designation for both Xantholinus and Othius; he referred the species back to fulgidus Fabricius, 1787, although on page 279 (under Othius) he actually gave it as "Othius fulgidus (Paykull) (Staphylinus)", and consequently synonymised both Xantholinus and Othius with Gyrohypnus.

6. In 1838, Westwood (1838, Gen. Syn.: 16) cited "Staph. fulgidus Payk." as the type species of Othius Leach [sic]. Tottenham (1949: 371) considered this citation as the type-species designation for Othius, in contradiction to his earlier statement (1939: 236 — see para. 5); he actually gave the species as "Staphylinus punctulatus Goeze, 1777", although on the previous page (370) he listed the synonymy "Staphylinus punctulatus Goeze,

1777 (= Staphylinus fulgidus Paykull, 1789)".

7. In 1859, C.G. Thomson (1859: 27) cited "X. fulgidus (Fab.): Gvll. II. 356. 71" as the type species of Xantholinus Dahl

[sic].

8. In 1860, C.G. Thomson (1860: 187–188) fixed "Staphylinus fulgidus Fab. Mant. Ins. I. 220.14" (i.e. 1787) as the type species of his new genus Gauropterus, by monotypy. Tottenham (1939: 237) recognised this as a valid type-species designation of a valid genus, basically because he identified Staphylinus fulgidus used by both Samouelle, 1819: 172 and Stephens (1833: 258) as identical with Staphylinus fulgidus sensu Paykull, 1789 (see para. 4 and 5). On the other hand, Blackwelder (1952: 168), who referred the species back to Staphylinus fulgidus Fabricius, 1787 (see para. 4 and 5), synonymised Gauropterus with Gyrohypnus.

9. The above paragraphs give the basic information on all critical type-species designations using the name Staphylinus fulgidus, and list the changes in the usage of the four generic names as they were proposed by Tottenham and by Blackwelder. In the following paragraphs, additional comments are presented, along with my proposals to the Commission, separately for each genus.

# A. Gyrohypnus Samouelle, 1819, ex Kirby MS

10. The name was first published by Samouelle (1819: 172) who credited it to Leach ("To my kind and valuable friend Dr

Leach I am indebted for the above and following notice of new

genera, ......').

11. Of the two different interpretations of the identity of Staphylinus fulgidus as used by Samouelle (see para. 4), the one by Blackwelder certainly was correct and was applied in strict accordance with the Code, but it was not generally accepted, except in North America. In addition, even North American authors did not interpret Blackwelder's proposal uniformly. Hatch (1957: 237) and Moore & Legner (1975: 73) applied the name correctly and included only fulgidus in the genus; Arnett (1960: 247, 274), on the other hand, misinterpreted Blackwelder and included in Gyrohypnus not only fulgidus, but also over 20 other species, which did not belong there.

12. Under these circumstances Blackwelder's proposal did not actually establish any stability and the confusion continued. For these reasons, I believe that the long-established name Gyrohypnus should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate Staphylinus fracticornis O.F. Müller, 1776 (Zool. Dan. Prodr.: 99) (=S. punctulatus sensu auct. non Paykull, 1789) which suits best this purpose, as the type species of Gyrohypnus. This species was assigned to Gyrohypnus ever since Mulsant & Rey (1877: 76), whose concept of Gyrohypnus was followed by all subsequent authors, included it there. Hyponygrus (isogenotypic), proposed by Tottenham (1940: 49) for a section of Xantholinus under the name Gyrohypnus in Mulsant & Rey, 1877 (for details

#### B. Xantholinus Dejean, 1821, ex Dahl

see Tottenham, 1940: 49), would become a junior objective

synonym of Gyrohypnus Samouelle, 1819.

13. There has been confusion over the authorship of this generic name which led to differences in usage (see Tottenham, 1949: 369 and Blackwelder, 1943: 474: 1952: 404 for details).

14. The name was first published in a catalogue by Dejean (1821: 23) who included 21 species (several of them having available names) in it, the first one being "Fulgidus. Grav." In accordance with Article 16a(v) of the Code, the inclusion of species with available names constituted an indication (Art. 12) and made the name Xantholinus available, with Dejean as the author, although Dejean himself gave Dahl as the author of the genus.

15. Stephens's statement on page 258 in his 1833 publication (see para. 5) was decidedly ambiguous and was unfortunately inter-

preted differently by Tottenham and by Blackwelder (see para. 5). What Stephens said was: (1) Dahl [Dejean] gave fulgidus sensu Gravenhorst, 1802 [a misidentification of fulgidus Fabricius, 1787] as the type species of Xantholinus [actually Dejean only listed it first]; (2) Latreille (1829: 435) characterised Xantholinus later as having anterior tarsi not, or very little, dilated, which is not true of fulgidus sensu Gravenhorst [it is true of fulgidus sensu Gravenhorst, but not of fulgidus sensu Paykull, 1789]; Stephens obviously misidentified fulgidus again and the species he really meant was actually Staphylinus fulgidus sensu Paykull, 1789, as already suggested by Tottenham (1939: 236). This concept is supported by the fact that (1) Stephens in 1829b (:284) listed "St. fulgidus. Payk.F.III.377" first under the genus "Othius, Leach MSS", (2) Stephens in 1833 in the same publication (:253) listed "St. fulgidus. Paykull. - Ot. fulgidus. Steph. Catal. 28 No. 3035" as first under the "Genus DXV. - Othius Leach MSS", and (3) Westwood (1838, Gen. Syn.: 16) cited "Staph. fulgidus Payk." as the type species of "Othius Leach" (see para. 6).

16. Despite these statements and facts, Blackwelder's proposal (see para. 5), based on strict interpretation of Article 30 of the Règles as modified by the Paris Congress (Bull. zool. Nom. vol. 4: 158), was correct, except that he should have referred these misidentified type species to the Commission. However, the name Xantholinus has been used ever since it was erected by almost all subsequent authors, especially by all modern authors, and Xantholinus became later the type genus of the subfamily XANTHOLI-NINAE: also, Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the longestablished name Xantholinus should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate Staphylinus linearis Olivier, 1794 (Entomol. vol. 3: No. 42: 19, pl. 4, fig. 38), which suits best this purpose, as the type species of Xantholinus. The genus Xantholinus was subsequently subdivided into large numbers of subgenera; Staphylinus linearis Ol. was invariably assigned by all authors to the subgenus Xantholinus ever since Mulsant & Rey (1877: 45) initiated the subdivision of Xantholinus.

### C. Othius Stephens, 1829, ex Leach MS

17. The name was first published in a catalogue by Stephens (1829a: 23) who included 10 species (several of them under available names) in it, the first one being "fulgidus, Pay." In accordance with Article 16a(v) of the Code, the inclusion of species

with available names constituted an indication (Art. 12) and made the name *Othius* available, with Stephens as the author, although Stephens himself gave Leach as the author of the genus.

18. The taxonomic identity of this genus is determined by the type-species designation made by Stephens (1833: 258) in the statement mentioned in para. 5. The comments made under *Xantholinus* in para. 15 above apply also in this case. Stephens obviously misidentified *fulgidus* and the species he really meant was actually *Staphylinus fulgidus* sensu Paykull, 1789 (= *Staphylinus punctula*-

tus Goeze, 1777).

19. As in the case of Xantholinus, Blackwelder's proposal (see para. 5) based on strict interpretation of Article 30 of the Règles as modified by the Paris Congress (Bull. zool. Nom. vol. 4: 158) was correct, except that he did not refer the misidentified type species to the Commission. However, the name Othius has been used by almost all subsequent authors, and especially by all modern authors; Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the long-established name Othius should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate Staphylinus punctulatus Goeze, 1777 (Ent. Beitr. vol. 1: 730) which suits best this purpose, as the type species of Othius

20. It may be added that *Othius* is the type genus of a family-group taxon, used most widely at tribe level OTHIINI. Some authors treat this as a subdivison of XANTHOLININAE and others, with XANTHOLININI, as a tribe of STAPHYLININAE. If *Othius* is not stabilised as here proposed, OTHIINI will have to be replaced by a new name based on *Gyrohypnus*, and this would entail an unnecessary disturbance of stability.

## D. Gauropterus C.G. Thomson, 1860

21. In 1859, C.G. Thomson cited fulgidus sensu Gyllenhal (see para. 7) as the type species of Xantholinus. In 1860, he divided the genus Xantholinus into three genera: Gauropterus, Nudobius and Xantholinus, and by including the true fulgidus Fabricius, 1787 (see para. 8) as the only species in Gauropterus, he automatically designated it as the type species. No other species has ever been cited as the type species of Gauropterus.

22. There is no doubt that under the strict application of the Code the name *Gauropterus* is a synonym of *Gyrohypnus* as proposed by Blackwelder, since there is no internal evidence that Leach had anything but the true *S. fulgidus* Fabricius, 1787 in mind

(see para. 8). However, the name Gauropterus has been used by almost all subsequent authors, and especially by all modern authors, and Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the long-established name Gauropterus should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group, with Staphylinus fulgidus Fabricius, 1787 (Mant. Ins. vol. I: 220) as the type species, as designated by C.G. Thomson (1860: 188).

23. The International Commission on Zoological Nomen-

clature is hereby requested to take the following actions:-

(1) to use its plenary powers:

(a) to set aside all designations of type species for the nominal genus *Gyrohypnus* Samouelle, 1819, and having done so, to designate *Staphylinus fracticornis* O.F. Müller, 1776, as type species;

(b) to set aside all designations of type species for the nominal genus *Xantholinus* Dejean, 1821, and having done so, to designate *Staphylinus linearis* 

Olivier, 1794, as type species;

(c) to set aside all designations of type species for the nominal genus *Othius* Stephens, 1829, and having done so, to designate *Staphylinus punctulatus* Goeze, 1777, as type species;

(2) to place the following generic names on the Official List

of Generic Names in Zoology:

(a) Gyrohypnus Samouelle, 1819 (gender: masculine), type species, by designation under the plenary powers in (1) (a) above, Staphylinus fracticornis O.F. Müller, 1776;

(b) Xantholinus Dejean, 1821 (gender: masculine), type species, by designation under the plenary powers in
 (1) (b) above, Staphylinus linearis Olivier, 1794;

(c) Othius Stephens, 1829 (gender: masculine), type species, by designation under the plenary powers in (1) (c) above, Staphylinus punctulatus Goeze, 1777;

(d) Gauropterus C.G. Thomson, 1860 (gender: masculine), type species, by monotypy, Staphylinus fulgidus Fabricius, 1787;

(3) to place the following specific names on the Official List

of Specific Names in Zoology:

(a) fracticornis O.F. Müller, 1776, as published in the binomen Staphylinus fracticornis (specific name of type species of Gyrohypnus Samouelle, 1819);

(b) linearis Olivier, 1794, as published in the binomen Staphylinus linearis (specific name of type species of Xantholinus Dejean, 1821);

(c) punctulatus Goeze, 1777, as published in the binomen Staphylinus punctulatus (specific name of

type species of Othius Stephens, 1829);

(d) fulgidus Fabricius, 1787, as published in the binomen Staphylinus fulgidus (specific name of type species of Gauropterus C.G. Thomson, 1860).

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